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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/423,179      | 11/02/1999  | DIETER ZWEIGLE       | K-53885             | 6456             |

7590 12/29/2003

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ALBUQUERQUE, NM 87111

EXAMINER

GARLAND, STEVEN R

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2125

DATE MAILED: 12/29/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/423,179

Applicant(s)

ZWEIGLE, DIETER

Examiner

Steven R Garland

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 18-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 12/2/03 has been entered.

2. Claim 27 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 18 has been amended to include the limitations of claim 27.

3. The substitute specification filed 12/2/03 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because: a marked up copy of the substitute specification has not been provided and the statement as to lack of new matter under 37 CFR 1.125(b) is missing.

4. The disclosure is objected to because of the following informalities: proper headings such as Brief Description of the Drawing; Detailed Description; Background of the Invention; etc should be used.

Appropriate correction is required.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 34 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 34, line 8, "the freely definable woven fabrics" lacks a proper antecedent basis.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 18,19,22-27, and 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevel et al. 6,130,746.

Nevel et al. teaches measuring yarn diameters, use of a input device to input the structure of the fabric, control of an optoelectronic measuring device, computing the woven fabric structure on the basis of the measured data, display of the developed fabric and display of actual fabric based on the measurements, use of multiple detection elements, statistical evaluation, 3D display of data, use of a printer, computer, and graphical display. See the abstract, figures, col. 2, lines 29-65; col. 3, line 1 to col. 4, line 39; col. 5, line 66 to col. 6, line 51; col. 7, line 19 to col. 9, line 27; and col. 10, lines 14-65.

Nevel however does not specifically state that the control and evaluation device ( comprising the computer ) controls the measuring device. Nevel does teach that the

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system determines the length and also the number of readings to be taken. Nevel also does not specifically state "changing " the actual fabrics so that the actual fabrics are " adapted and optimized " to the measured diameters and input woven fabrics. Nevel however does display the fabric based on the measurements and input fabrics and which is changed based on the measurements which obviously includes the yarn diameters. Further Nevel does teach adjusting the fabric on the basis of the measurements and the input pattern, but does not specifically mention the diameter. Note col. 8, lines 16-55 and col. 7, lines 23-39.

It would have been obvious to one of ordinary skill in the art to modify Nevel to have the control and evaluation device control the measurement device so that the proper number of readings could be taken and at the proper locations without the operator having to do manual computations and then enter them.

Further it would have been obvious to one of ordinary skill in the art to modify Nevel to optimize the produced fabric on the basis of the measured data including the diameter data and input fabric pattern in view of the teachings of Nevel so that less defective fabric is produced on a different sized loom.

In response to applicant's arguments, while Nevel claims a method for clearing yarns, as applicant argues, this is not the only thing Nevel discloses. Nevel additionally teaches the various features noted above.

9. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevel et al. 6,130,746 in view of Massen 4,887,155.

Nevel et al. teaches measuring yarn diameters, use of a input device to input the structure of the fabric, control of an optoelectronic measuring device, computing the woven fabric structure on the basis of the measured data, display of the developed fabric and display of actual fabric based on the measurements, use of multiple detection elements, statistical evaluation, 3D display of data, use of a printer, computer, and graphical display. See the abstract, figures, col. 2, lines 29-65; col. 3, line 1 to col. 4, line 39; col. 5, line 66 to col. 6, line 51; col. 7, line 19 to col. 9, line 27; and col. 10, lines 14-65.

Nevel however does not specifically state that the control and evaluation device ( comprising the computer ) controls the measuring device. Nevel does teach that the system determines the length and also the number of readings to be taken. Nevel also does not specifically state "changing " the actual fabrics so that the actual fabrics are " adapted and optimized " to the measured diameters and input woven fabrics. Nevel however does display the fabric based on the measurements and input fabrics and which is changed based on the measurements which obviously includes the yarn diameters. Further Nevel does teach adjusting the fabric on the basis of the measurements and the input pattern, but does not specifically mention the diameter. Note col. 8, lines 16-55 and col. 7, lines 23-39.

It would have been obvious to one of ordinary skill in the art to modify Nevel to have the control and evaluation device control the measurement device so that the proper number of readings could be taken and at the proper locations without the operator having to do manual computations and then enter them.

Further it would have been obvious to one of ordinary skill in the art to modify Nevel to optimize the produced fabric on the basis of the measured data including the diameter data and input fabric pattern in view of the teachings of Nevel so that less defective fabric is produced on a different sized loom.

Nevel however does not teach the use of an infrared sensor or disclose the accuracy of the measuring device. .

Massen teaches the use of infrared sensing for increased measurement accuracy and synchronizing a strobe light and the measurement device. See the figures; col. 2, lines 36-41; col. 4, line 52 to col. 5, line 12.

It would have been obvious to one of ordinary skill in the art to modify Nevel in view of Massen and use an infrared measurement device for increased measurement accuracy.


Further it would have been obvious to one of ordinary skill in the art to modify Nevel in view of Massen to adapt the system to measure the yarn to the required accuracy so that the fabric can be accurately displayed and the various flaws accurately detected. In response to applicant's arguments, while Nevel claims a method for clearing yarns, as applicant argues, this is not the only thing Nevel discloses. Nevel additionally teaches the various features noted above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R Garland whose telephone number is 703-305-9759. The examiner can normally be reached on Monday-Thursday from 6:30 to 5:00.

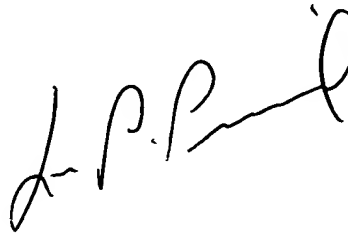
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on 703-308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-3900.



Steven R Garland  
Examiner  
Art Unit 2125



LEO PICARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100